



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/561,386

12/19/2005

Junji Morita

070365-0019

1649

20277 7590 03/15/2010
MCDERMOTT WILL & EMERY LLP
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096

EXAMINER

MARTIN, ANGELA J

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

03/15/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,386	Applicant(s) MORITA ET AL.	
	Examiner ANGELA J. MARTIN	Art Unit 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is responsive to the Amendment filed on November 4, 2009. The Applicant has amended claims 1-9; pending claims are claims 1-10. A new rejection is presented for the following reasons of record.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Jia et al. , US 2003/0224226.

Regarding claim 1, Jia teaches a self-conditioning system composed of a fuel cell, a fuel supply system, an oxidant supply system, and a controller (abstract; 0016). The fuel supply system includes fuel valving for controlling the flow of fuel to an anode and a cathode (0016). The oxidant supply system includes oxidant valving for controlling the flow of oxidant to the cathode (0016). The controller is used to control the fuel and oxidant valving such that, during normal operation, fuel is supplied to the anode and that oxidant is supplied to the cathode (0016). However, when the system is

Art Unit: 1795

conditioning, fuel is supplied to the cathode and oxidant is not supplied to the cathode (0016). Jia also teaches that one may also consider running conditioning cycles partway through a storage period or even at shutdown (0028). Jia teaches that that a controller can facilitate the start-up of a system after storage, control activities during normal system operations, and direct system activity during shutdown (0023; 0035).

Regarding claim 2, Jia teaches raw material gas supplying means purges anode side inside fuel cell after purging cathode side (0016).

Regarding claim 3, Jia teaches a valving system, including a fuel gas on-off valve and a oxidizing agent gas on-off valve, and a raw material gas on-off valve (0016; 0021; Fig. 1, ref 15 oxidant valve, ref 16 fuel valve, ref 17 fuel conditioning valve).

Regarding claim 4, Jia teaches cathode exhaust pipe, cathode off-gas valve, purge via raw material gas valve (0021; exhaust line 12 in Fig. 1).

Regarding claim 5, Jia teaches an additional shutoff valve in gas line (0021).

Regarding claim 6, Jia teaches oxidizing agent supplied to fuel gas and oxidizing agent gas to fuel cell by opening anode valve, opening fuel valve, opening cathode valve and opening oxidizing agent valve (0021).

Regarding claim 7, Jia teaches method of starting fuel cell system including purging on cathode side with a raw material gas (0016; 0023).

Regarding claim 8, Jia teaches anode is purged after purging cathode (0021).

Regarding claim 9, Jia teaches program of computer-controlling ("controller") a step of purging (0021).

Regarding claim 10, Jia teaches a recording medium carrying a program which can be processed by a computer (0023).

Thus, the claims are anticipated.

Response to Arguments

3. Applicant's arguments with respect to above claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Goebel, US 6,939,633 teaches a method for operating a fuel cell system (including system startup and shutdown).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANGELA J. MARTIN whose telephone number is (571)272-1288. The examiner can normally be reached on Monday-Friday from 10:00 am to 6:00 pm.

Art Unit: 1795

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on 571-272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AJM

/Angela J. Martin/

Examiner, Art Unit 1795